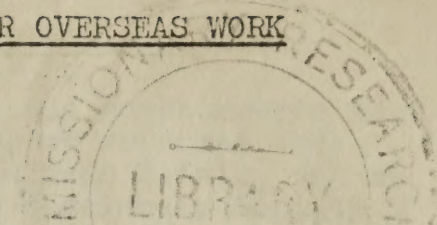


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Missy pers. PSYCHOMETRIC TESTING OF CANDIDATES FOR OVERSEAS WORK

by

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During the last three and a half years the Candidate Department of the American Board of Commissioners for Foreign Missions has been using a battery of psychometric tests as a part of the screening process in selecting new missionaries. The tests have been given to 118 candidates and experienced missionaries during this period. Twenty-three experienced missionaries who have been successful on the field were selected as testees to help us evaluate the findings of this new procedure. Our plan is to study this scheme after it has been in use for a period of five years to determine whether or not it should be continued.

In response to the request of Rev. Robert E. Chandler, then Candidate Secretary, the tests were selected by Professor A. Philip Guiles and Rev. John Billinsky, members of the Psychology Department of Andover Newton School of Theology. They also instructed us how to administer the tests, analyze the scores, and interpret the findings. The scoring of the tests has been done by them and also by the Occupational Services Department of the Y.M.C.A. in Boston. Our battery of tests includes: 1) The Ohio State University Psychological Test, prepared by Herbert A. Toops, 2) Vocational Interest Blank, by Edward K. Strong, 3) A Study of Values, by Gordon W. Allport and Philip E. Bernon, 4) Preference Record by G. Frederic Kuder, and 5) The Personality Inventory, by Robert G. Bernreuter.

My tentative conclusion is that these tests have been quite reliable in revealing what we already knew about active missionaries, and I believe that on the whole the testing process gives us valuable objective data about candidates which assists us in evaluating the personal references which we receive from friends who know them. We do not give undue importance to the test findings, but consider them as a part of the evidence we collect. In several cases the psychological findings confirmed minority reports on emotional instability and led us to reject the applicants. In other cases where personal references did not point out such traits, candidates were appointed, even though the test results would lead us to believe that we were taking considerable risk in doing so.

Of the 118 tested, 23 were experienced missionaries, one was a minister in the U.S.A., and 94 were candidates for appointment. Of the 94 candidates, five withdrew their applications, and four withdrew themselves after appointment but before sailing. Five were rejected by the Candidate Committee. Only two of the five were turned down because of the findings presented by the psychometric tests.

Until we have used the tests for at least five years, studied the scores, and checked the performance of the testees on the field, we will not be able to determine satisfactory norms, or the upper and lower limits in certain categories beyond which suitable candidates should not score. I believe that the establishment of reasonable norms and danger zones will be possible after the trial period has been completed, and results tabulated.

In one case where both personal references and psychometric test scores indicated serious psychological problems, we referred the candidate to the doctors in the University of Chicago Clinic, who do the medical and psychological screening for the Missionary Society of the Disciples of Christ Church. The interview was arranged and we received detailed reports from Dr. G. K. Yacorzynski and Dr. Jules H. Masserman, which confirmed our doubts with much more detailed evidence than our tests revealed. These medical men helped the candidate see that it was not to her advantage to go abroad, so she withdrew her application even before we received the psychiatrists' reports. This was a real service to the candidate, as well as to the American Board.

Another case involved a married couple, one of whom was a divorcee. The previous marriage had failed, and certain problems were threatening the second marriage. Judging from the test scores on the A.N.T.S. psychological test, and from personal interviews and references, it appeared that they were making satisfactory marital adjustments, were deeply interested in mission service, and were well qualified to become missionaries. Yet we desired more assurance. So they were put in touch with the staff of the University of Chicago Clinic. No significant new facts were brought out by the more thorough psychological and physical examinations which would jeopardize or improve their chances for appointment. The findings supported our conclusions that they were intellectually qualified, mature enough to face with assurance the future problems in their home and the new community abroad, and were sufficiently well balanced emotionally to make a happy adjustment as missionaries. These experiences, and others not reported here, increase my confidence in the value of our testing program.

Except in special cases where we need expert advice, I do not recommend that the American Board should undertake the more detailed and more expensive screening process adopted by the United Christian Missionary Society of the Disciples of Christ Church. They send their missionary candidates after they have become juniors in college to clinics in Chicago, Illinois, New York City, or Richmond, Virginia, or elsewhere, for two days of medical and psychological tests. These clinics charge from \$50 to \$75 for each candidate's examination and report. Our method is costing us about \$10.00 each. There is no doubt but that the U.C.M.S. has a more thorough method than ours. Their "Health Surveys" increase the Personnel Secretary's opportunities to counsel with candidates in regard to vocational choices and personality difficulties. Dr. E. K. Higdon says, "We estimate that we have saved in the last four and one half years in travel and salaries of new missionaries who might not have made a go of it considerably more than we have expended for our health surveys".

One of the unusual features of our procedure is to give the tests on a self-administering basis. After candidates are ready to make formal application for appointment they are sent the battery of tests which they take in their own homes and at their own convenience. They are put on their honor for the O.S.U.P. test, which is the only one that might present a temptation to look up or seek from others the right answers. Since there is no time limit specified, I feel that there are certain advantages in allowing the testees the privilege

of doing this work alone, rather than in a group where some would naturally feel that they were competing with others who would surely excel them. It is my opinion that they are more likely to do better alone than in a group. A special letter is sent with the battery of tests, since it is necessary to put the candidates at ease, and to explain a few details before they proceed with the assignment. It seems to me that the simplicity and economy of this scheme of testing candidates makes it ideal for our purpose.

On the basis of only three and one half years' experience in psychometric testing, it is impossible to conclude very conclusively. Nevertheless, I present a few observations and venture to suggest tentative norms and danger zones which may prove useful in selecting new missionaries.

1. Ohio State University Psychological Test:

The average or "Mean" score of 19 missionaries was 128, with four rating 143, six 135 to 142, four 125 to 134 three 100 to 124, and two under 100. The Mean for the 87 candidates was 125, the highest score being 145. 30 scored above 135, 26 between 125-134, 23 between 100-124, and 8 below 100. RATINGS ABOVE 135 MAY BE CONSIDERED EXCELLENT, FROM 125 TO 134 GOOD, FROM 100 TO 124 FAIR, AND BELOW 100 POOR.

2. Study of Values:

This test measures the relative prominence of six basic interests or motives in personality; the theoretical, economic, aesthetic, social, political, and religious.

(a) Theoretical...interest in abstract thinking and the intellectual pursuit of truth. In this category, as in the other five, Dr. Allport considers a score of 30 as the Mean of the population. 35 of our group scored higher than 30, 7 rated 30, and 64 scored between 20 and 29.

(b) Economic...interest in what is practical and useful, conforming to the prevailing stereotype of the average business man. All but five of our group scored below the Mean of the population. In fact, the Mean of our group was 17, which would indicate that missionaries are not generally the "business man" type.

(c) Aesthetic...interest in form, harmony, and beauty; diametrically opposed to the theoretical which considers truth supreme. The aesthete may consider truth as equivalent to beauty. Our Mean score was 27, which means that 81 were less aesthetic, and 30 were more aesthetic than the average of the population.

(d) Social...basic interest is love of people, and in unselfish, friendly relations with people. Our Mean score was 35, which indicates that missionaries are more concerned for others than the average person is. Only 11 scored less than 30 in the Social category.

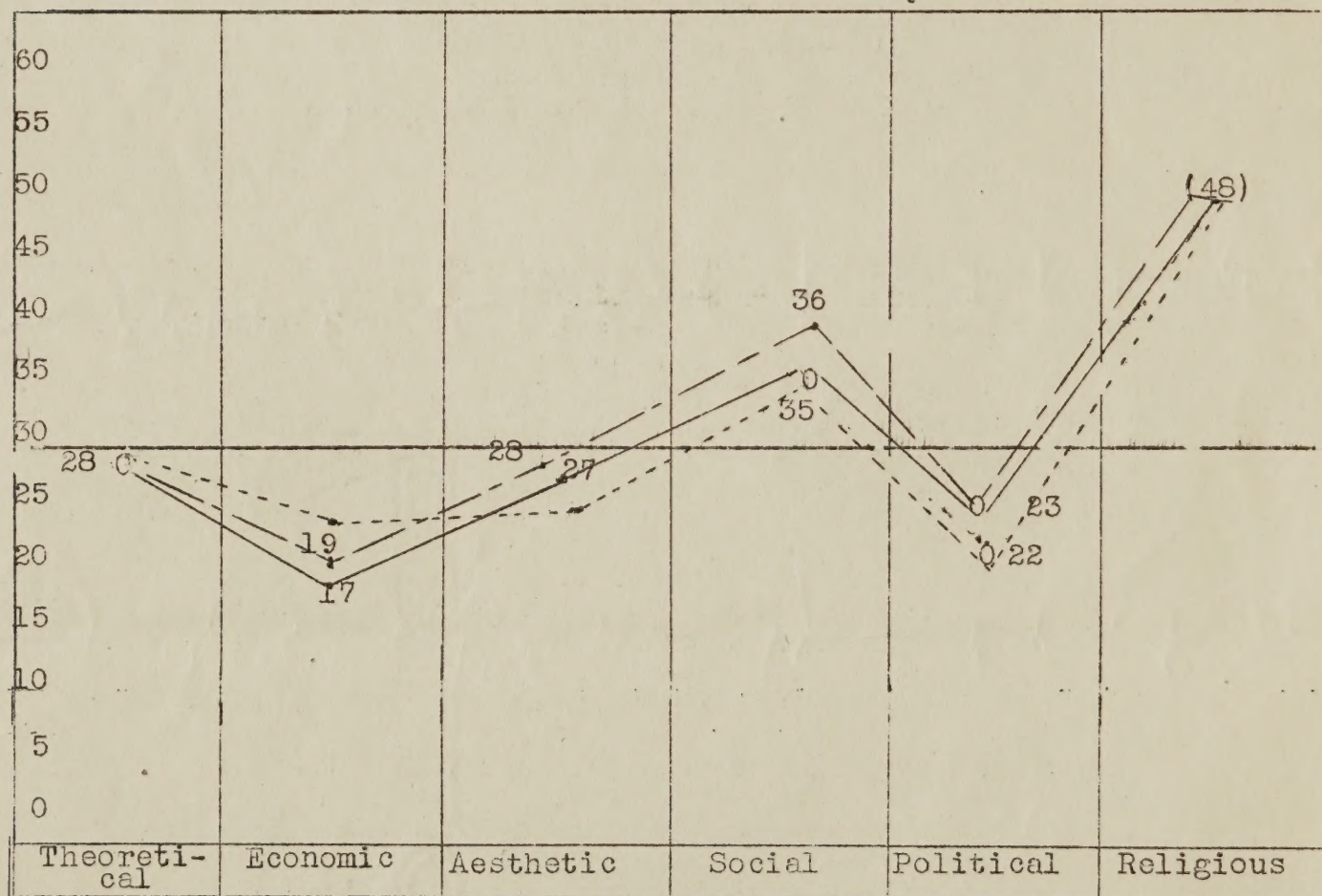
(e) Political...interest in personal power, influence, and

renown. Leaders in any field generally have high power value. Our Mean was 23. Only 7 scored more than 30, while 39 scored between 24 and 29.

(f) Religious...interest in mystical experience, cosmic unity, sees the divine in every event, tendency to withdraw from the world to comprehend the cosmos and to meditate. Our Mean score in the religious category was 50. A total of 56 scored between 50 and 60 on this test, 54 between 30 and 49, and one scored 29.

The following diagram presents the findings of our tests in relation to Dr. Allport's studies, charting the (average) Mean profile of values for 17 experienced missionaries, and 94 candidates, of whom 85 were appointed:

ALLPORT'S STUDY OF VALUES...Arbitrary Mean Scores



———— 17 Missionaries of the American Board

- - - - 94 Candidates for overseas service.

..... 80 Missionaries tested by Dr. Allport.

We may tentatively conclude that those scoring within ten points of the scores on the "Missionaries' Profile" on the chart (p. 4) have the basic interests which would lead them to become satisfactory missionaries. It should be pointed out, however, that they would be "average" missionaries. Perhaps the Giants of the Kingdom would be endowed with quite a different pattern or dominant personality interests!

3. Strong's Vocational Interest Blank:

This test ascertains whether or not a person's interest patterns are similar to others who have been successful in different vocations. It does not measure ability in these fields. If a person likes the same things as do successful people working in a particular occupation, it is assumed he will most likely succeed in it. A score of A has predictive value, and B+ some value, indicative of future success. The use of this test helps us to judge whether or not the position sought by the candidate fits his particular vocational interests. If he scores B or below in the type of work anticipated, he and we should seriously consider whether or not he has made the best vocational choice. Our candidates have consistently rated A's or B+'s in the work they anticipated.

4. Kuder Preference Test:

This test measures preferences in various lines of study and work -- but not ability. It gives us some insight as to which field of activity will induce him to use the abilities he does possess. The findings often supplement Strong's Vocational Interest Blank by pointing out fields of interest not specified in the latter, or by confirming the ratings in fields common to both tests. It is useful for the Candidate Secretary to know how the applicants score in the following lines: mechanical, computational, scientific, persuasive, artistic, literary, musical, social service, and clerical. The test scores indicate whether or not an individual's choice of an occupation is consistent with the type of thing he ordinarily prefers to do.

5. Bernreuter's Personality Inventory:

While it is acknowledged that this multiple choice personality test is not as reliable as others which are more difficult to administer, and more expensive to use, it seems to have presented personality profiles of 20 people whom we know which correspond quite accurately with known facts. We therefore assume that the scores made by a candidate present a reasonably accurate personality profile for the traits measured in these four scales:

1. Neurotic-emotional stability

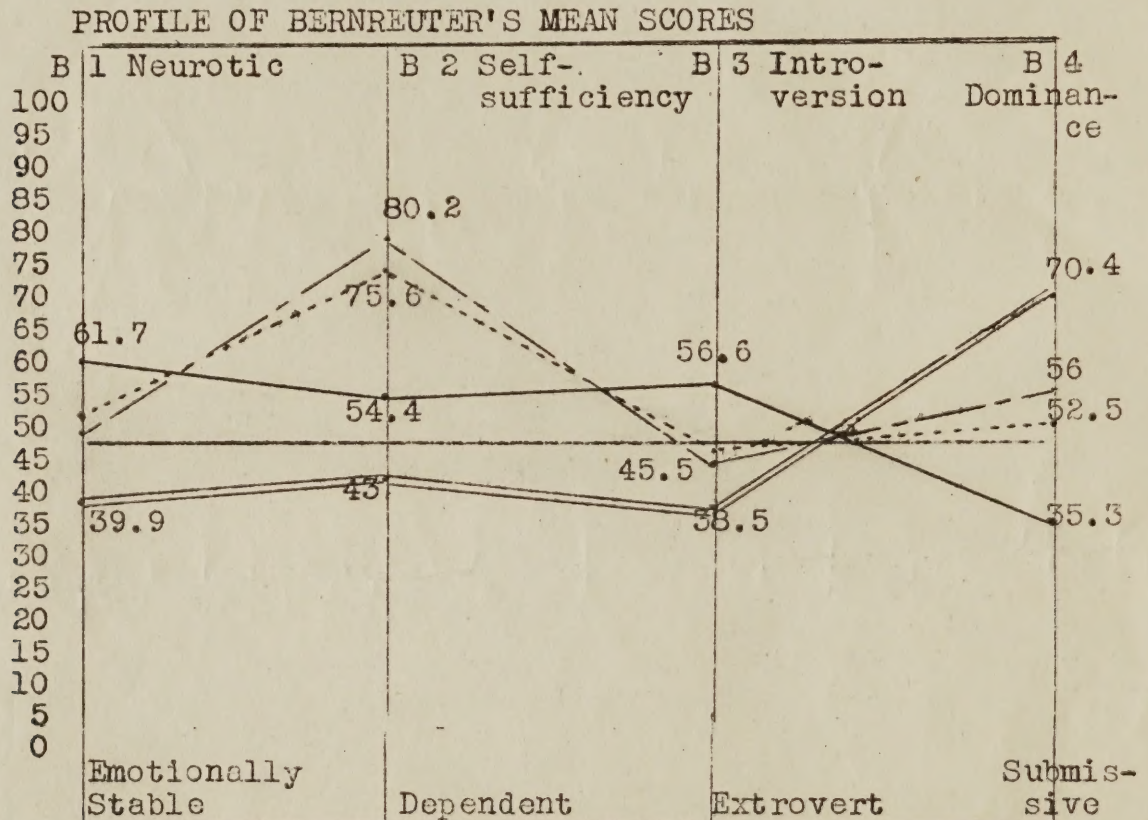
2. Independence-dependence

3. Introversiion-extroversion

4. Dominance-submission

A high score indicates the first trait in each scale, while a low score means the second trait describes the personality.

According to the psychologists, the most satisfactory profile on Bernreuter's Inventory is one that does not vary too much from the Mean (50). Further, they contend that the more irregular the profile, the more unbalanced the personality is likely to be. The following chart presents the personality profiles of our group in relation to that of 150 life insurance salesmen:



20 missionaries. 61.7-54.4-56.6-35.3

95 candidates. 50.4-80.2-45.5-56

Total A.B. group. 52.3-75.6-47.6-52.5

150 successful salesmen of the
Aetna Life Insurance Company. 39.9-43-38.5-70.4

1. Neurotic-emotional stability scale. The Mean for missionaries was 61.7, for candidates 50.3. One missionary scored 99, while one other scored 98, as did also three candidates. One of the three was rejected because there was abundant evidence of instability. According to Bernreuter, anyone in these two high brackets would profit by consulting a psychiatrist. We appointed two people with scores of 98 because we ventured to hope that their married partners, who were unusually well balanced individuals, would help in making difficult adjustments. Time will provide a verdict on our decision.

PROBABLY NO ONE SCORING 98 OR 99 SHOULD BE APPOINTED. Anyone with a score from 95 to 97 should have at least one interview with a psychologist. This range may be considered a danger zone, and indicate risk.

2. Independence-dependence scale. On the whole the recruits seem to be more self-sufficient or independent than the experienced missionaries. The recruits' Mean was 80.2, missionaries 54.4. Perhaps life's hard knocks and wider experience will make the candidates more dependent in the future. It would be of great interest to see their scores if this test could be given again ten years hence. I see no danger in a high score in this category, unless the testee has scores above 90 also in B.1 and B.4 (see chart). Anyone scoring below 50 should be counseled to develop more independence, in order to become a well rounded personality with leadership ability.

3. Introversion-extroversion scale. There seems to be a definite correlation of the scores on this scale with B.1, for the 19 who rated above 80 were among the 27 whose scores were above 80 on B.1. Likewise, out of the 24 who scored 20 or below, 19 were the same people who made 20 or less on B.1. The Mean scores for missionaries is 56.6, for candidates 45.5.

PROBABLY THOSE SCORING BETWEEN 95 AND 100 WOULD PROFIT BY COUNSELING WITH A PSYCHOLOGIST. Bearing in mind the correlation referred to above, there is likely to be a real risk in appointing them as missionaries without expert psychiatric advice.

4. Dominance-submission scale. Judging from our findings, missionaries are certainly not a domineering group. The Mean score was only 35.3-14.7 points below the population Mean. The highest rating was 82. Only six others scored above 50, while four scored between 20 and 50, and nine under 20. I should think the candidates' Mean score of 56 is much more desirable for successful missionaries, since they must be leaders, even though they lead from the sidelines or out of the spotlight, in this new era when nationals must be trained for the positions of responsibility. The successful missionary should be a well rounded, sensitive personality with emotional stability, self-confidence, the ability to forget oneself in the service of others, and dominance enough to lead without domineering.

Nov. 30, 1948.

Loy L. Long

